

UNITED STATES OFFICE
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
OCD Hobbs 2018

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator: DEVON ENERGY PRODUCTION COMPANY LP (6137)

3a. Address: 333 West Sheridan Avenue Oklahoma City OK

3b. Phone No. (include area code): (405)552-6571

4. Location of Well (Report location clearly and in accordance with any State requirements.):
At surface SWSE / 380 FSL / 1650 FEL / LAT 32.138898 / LONG -103.5910902
At proposed prod. zone NWNE / 330 FNL / 1500 FEL / LAT 32.1514608 / LONG -103.5905806

5. Lease Serial No.: NMNM097151

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA Agreement, Name and No.:

8. Lease Name and Well No.: FLAGLER 8 FED 21H (322149)

9. API Well No.: 30-024-44993

10. Field and Pool, or Exploratory: DRAPER MILL / BONE SPRING (96392)

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 8 / T25S / R33E / NMP

12. County or Parish: LEA

13. State: NM

14. Distance in miles and direction from nearest town or post office*:

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 380 feet

16. No. of acres in lease: 520

17. Spacing Unit dedicated to this well: 160

18. Distance from proposed location* to nearest well, drilling, completed, 1985 feet applied for, on this lease, ft.:

19. Proposed Depth: 10425 feet / 14934 feet

20. BLM/BIA Bond No. on file: FED: CO1104

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3438 feet

22. Approximate date work will start*: 03/15/2019

23. Estimated duration: 45 days

24. Attachments:

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature: (Electronic Submission)

Name (Printed/Typed): Rebecca Deal / Ph: (405)228-8429

Date: 03/20/2018

Title: Regulatory Compliance Professional

Approved by (Signature): (Electronic Submission)

Name (Printed/Typed): Cody Layton / Ph: (575)234-5959

Date: 07/06/2018

Title: Supervisor Multiple Resources

Office: CARLSBAD

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

APPROVED WITH CONDITIONS
Approval Date: 07/06/2018

KZ
07/14/18
Requires NSL
Double Sided

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

1. SHL: SWSE / 380 FSL / 1650 FEL / TWSP: 25S / RANGE: 33E / SECTION: 8 / LAT: 32.138898 / LONG: -103.5910902 (TVD: 0 feet, MD: 0 feet)
PPP: SWSE / 330 FSL / 1500 FEL / TWSP: 25S / RANGE: 33E / SECTION: 8 / LAT: 32.138758 / LONG: -103.590684 (TVD: 10215 feet, MD: 10249 feet)
BHL: NWNE / 330 FNL / 1500 FEL / TWSP: 25S / RANGE: 33E / SECTION: 8 / LAT: 32.1514608 / LONG: -103.5905806 (TVD: 10425 feet, MD: 14934 feet)

BLM Point of Contact

Name: Priscilla Perez

Title: Legal Instruments Examiner

Phone: 5752345934

Email: pperez@blm.gov

CONFIDENTIAL

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

CONFIDENTIAL



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Operator Certification Data Report

07/08/2018

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Rebecca Deal

Signed on: 03/19/2018

Title: Regulatory Compliance Professional

Street Address: 333 West Sheridan Avenue

City: Oklahoma City

State: OK

Zip: 73102

Phone: (405)228-8429

Email address: Rebecca.Deal@dvn.com

Field Representative

Representative Name: Travis Phibbs

Street Address: 6488 Seven Rivers Hwy

City: Artesia

State: NM

Zip: 88210

Phone: (575)748-9929

Email address: travis.phibbs@dvn.com



APD ID: 10400028550

Submission Date: 03/20/2018

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FLAGLER 8 FED

Well Number: 21H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data
check the most
recent version

Show Final Text

Section 1 - General

APD ID: 10400028550

Tie to previous NOS?

Submission Date: 03/20/2018

BLM Office: CARLSBAD

User: Rebecca Deal

Title: Regulatory Compliance
Professional

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM097151

Lease Acres: 520

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO

APD Operator: DEVON ENERGY PRODUCTION COMPANY LP

Operator letter of designation:

Operator Info

Operator Organization Name: DEVON ENERGY PRODUCTION COMPANY LP

Operator Address: 333 West Sheridan Avenue

Zip: 73102

Operator PO Box:

Operator City: Oklahoma City

State: OK

Operator Phone: (405)552-6571

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: FLAGLER 8 FED

Well Number: 21H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: DRAPER MILL

Pool Name: BONE SPRING

Is the proposed well in an area containing other mineral resources? USEABLE WATER

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FLAGLER 8 FED

Well Number: 21H

Describe other minerals:

Is the proposed well in a Helium production area? N

Use Existing Well Pad? NO

New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name:

Number: 4

FLAGLER 8

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town:

Distance to nearest well: 1985 FT

Distance to lease line: 380 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: Flagler_8_Fed_21H_C_102_Signed_20180517082227.pdf

Well work start Date: 03/15/2019

Duration: 45 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	380	FSL	165 0	FEL	25S	33E	8	Aliquot SWSE	32.13889 8	- 103.5910 902	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 097151	343 8	0	0
KOP Leg #1	230	FSL	150 0	FEL	25S	33E	8	Aliquot SWSE	32.13840 1	- 103.5906 87	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 097151	- 641 2	985 6	985 0
PPP Leg #1	330	FSL	150 0	FEL	25S	33E	8	Aliquot SWSE	32.13875 8	- 103.5906 84	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 097151	- 677 7	102 49	102 15

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

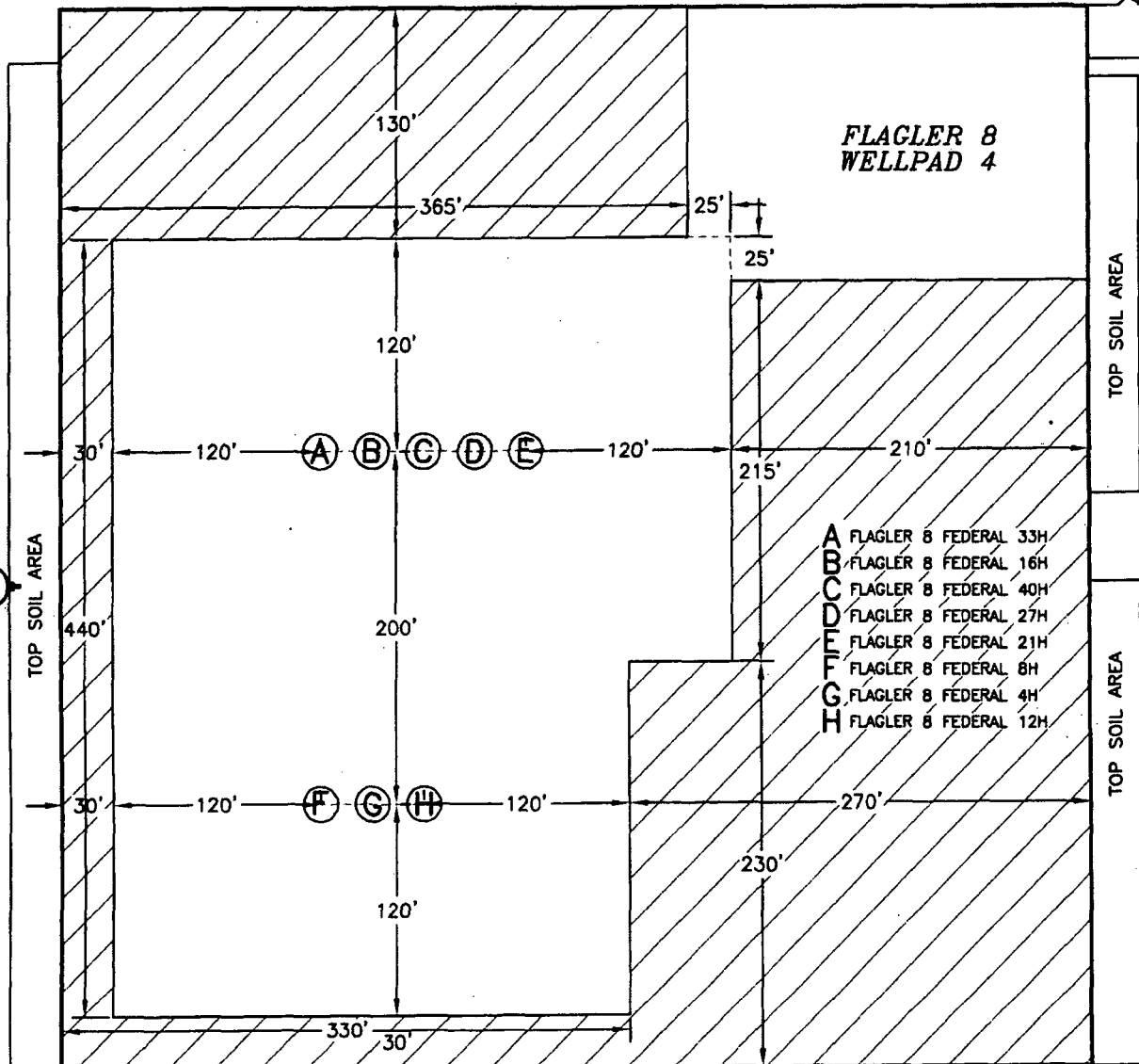
Well Name: FLAGLER 8 FED

Well Number: 21H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	330	FNL	150 0	FEL	25S	33E	8	Aliquot NWNE	32.15146 08	- 103.5905 806	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 097151	- 698 7	149 34	104 25
BHL Leg #1	330	FNL	150 0	FEL	25S	33E	8	Aliquot NWNE	32.15146 08	- 103.5905 806	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 097151	- 698 7	149 34	104 25

SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE BUILD PLAN

PROPOSED 700 L.F.
ACCESS ROAD



HATCHED AREA
DENOTES PAD
RECLAMATION AREA

0 50 100 200
SCALE 1" = 100'

4.081± ACRES PAD RECLAMATION AREA
4.183± ACRES NON-RECLAIMED AREA
8.264± ACRES FLAGLER 8 WELLPAD 4

DEVON ENERGY PRODUCTION COMPANY, L.P.
FLAGLER 8 FEDERAL 21H

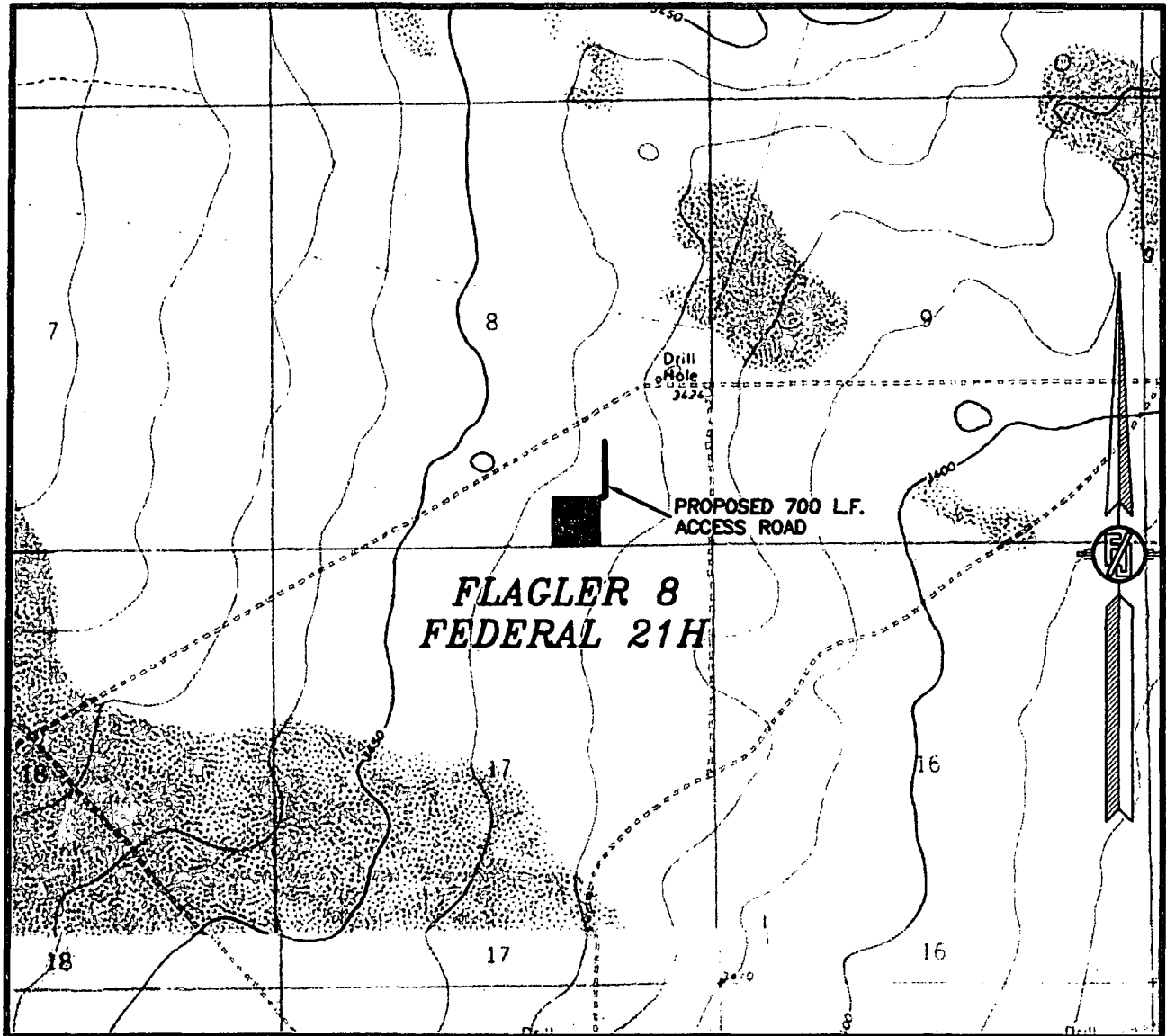
LOCATED 380 FT. FROM THE SOUTH LINE
AND 1650 FT. FROM THE EAST LINE OF
SECTION 8, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

JANUARY 28, 2018

SURVEY NO. 5828A

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3341

SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
BELL LAKE

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.
FLAGLER 8 FEDERAL 21H

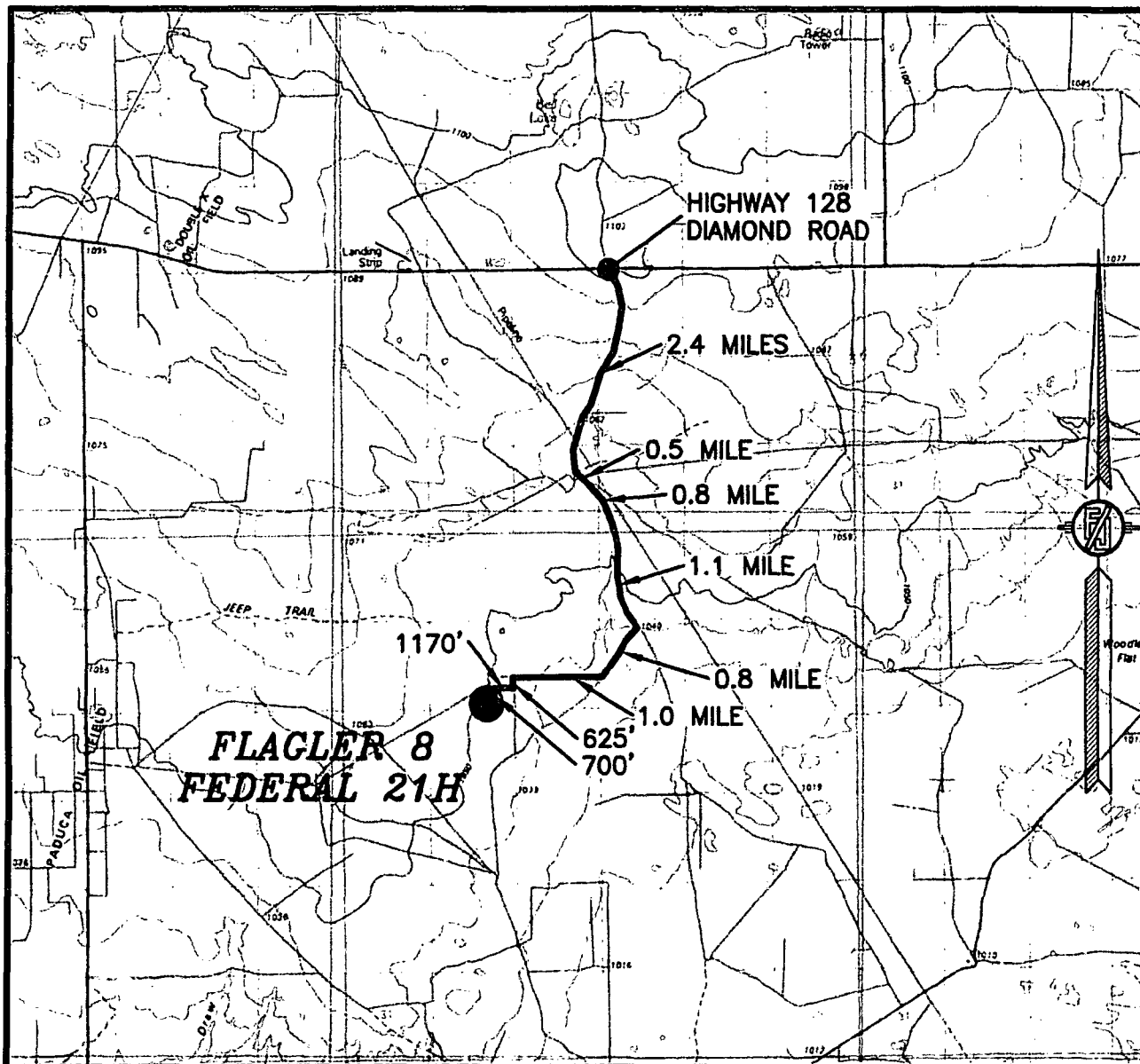
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RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

JANUARY 28, 2018

SURVEY NO. 5828A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF HWY. 128 & DIAMOND ROAD, GO SOUTH ON DIAMOND ROAD APPROX. 2.4 MILES WHERE PAVEMENT ENDS & RANCH HOUSE, CONTINUE SOUTH APPROX. 0.5 MILE TO A "Y" INTERSECTION, GO SOUTH APPROX. 0.8 MILE TO A CATTLE GUARD, CONTINUE SOUTH APPROX. 1.1 MILE TO A "Y" INTERSECTION, GO SOUTHWEST ON LEASE ROAD APPROX 0.8 MILE TO A LEASE ROAD ON RIGHT (WEST), TURN WEST (RIGHT) GO 1.0 MILE TO GATE, GO THROUGH GATE TO A PROPOSED ROAD SURVEY, FOLLOW PROPOSED ROAD SOUTH 625' TO A PROPOSED "T" INTERSECTION, GO WEST 1170' TO A PROPOSED "T" INTERSECTION, GO SOUTH AND WEST 700' TO THE NORTHEAST PAD CORNER FOR THIS LOCATION.

DEVON ENERGY PRODUCTION COMPANY, L.P.

FLAGLER 8 FEDERAL 21H

LOCATED 380 FT. FROM THE SOUTH LINE

AND 1650 FT. FROM THE EAST LINE OF

SECTION 8, TOWNSHIP 25 SOUTH,

RANGE 33 EAST, N.M.P.M.

LEA COUNTY, STATE OF NEW MEXICO

JANUARY 28, 2018

SURVEY NO. 5828A

MADRON SURVEYING, INC. 301 SOUTH CANAL

(575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
NOV. 2017

DEVON ENERGY PRODUCTION COMPANY, L.P.
FLAGLER 8 FEDERAL 21H

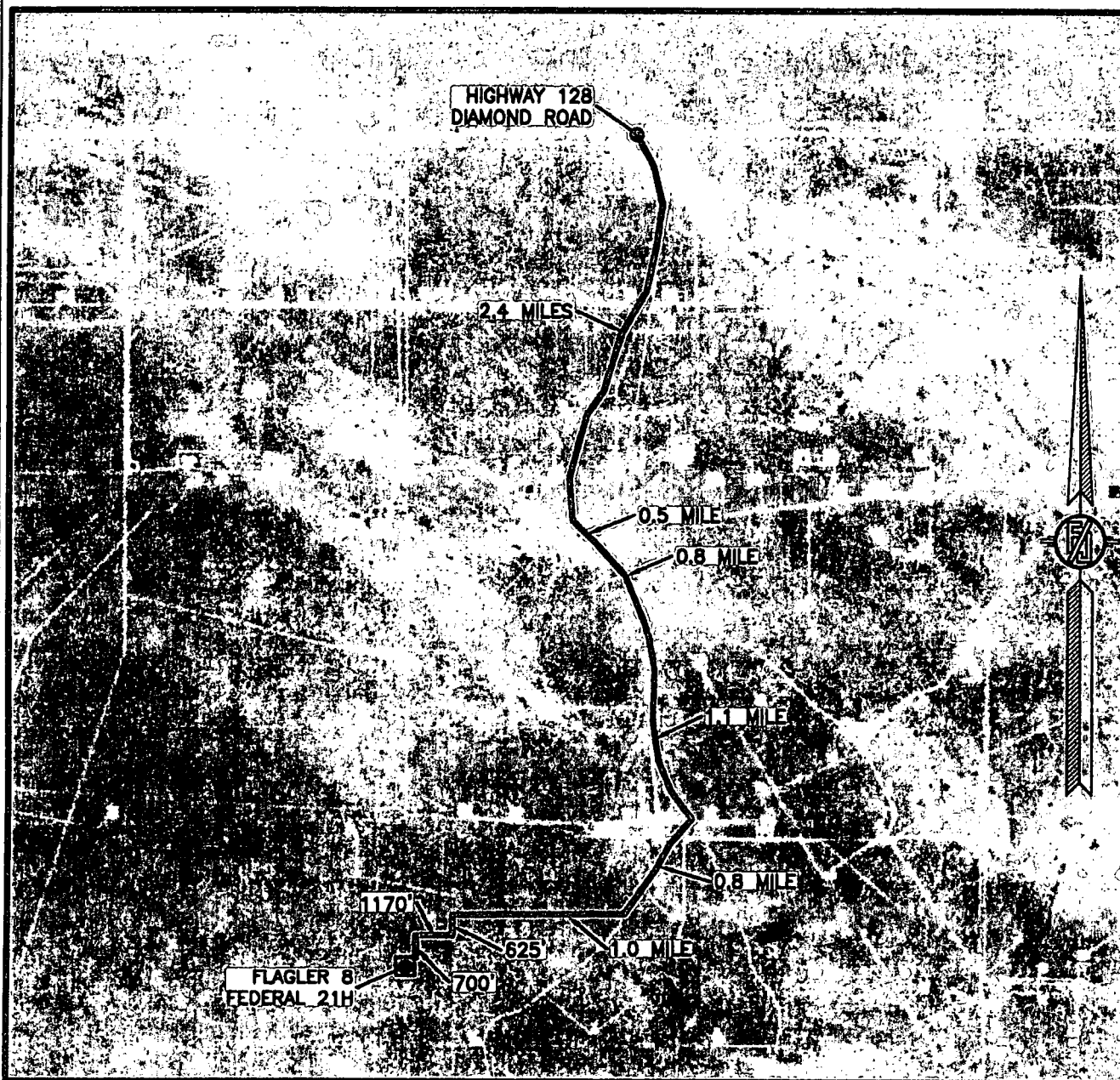
LOCATED 380 FT. FROM THE SOUTH LINE
AND 1650 FT. FROM THE EAST LINE OF
SECTION 8, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

JANUARY 28, 2018

SURVEY NO. 5828A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
NOV. 2017

DEVON ENERGY PRODUCTION COMPANY, L.P.
FLAGLER 8 FEDERAL 21H

LOCATED 380 FT. FROM THE SOUTH LINE
AND 1650 FT. FROM THE EAST LINE OF
SECTION 8, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

JANUARY 28, 2018

SURVEY NO. 5828A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

PLAN VIEW

LIMITS OF
EARTHWORK
3:1 SLOPE (TYP.)

LIMITS OF
EARTHWORK
3:1 SLOPE (TYP.)

**FLAGLER
8 WELLPAD 4**
PROPOSED PAD
EL. = 3438.0'

A FLAGLER 8 FEDERAL 33H
B FLAGLER 8 FEDERAL 16H
C FLAGLER 8 FEDERAL 40H
D FLAGLER 8 FEDERAL 27H
E FLAGLER 8 FEDERAL 21H
F FLAGLER 8 FEDERAL 8H
G FLAGLER 8 FEDERAL 4H
H FLAGLER 8 FEDERAL 12H

PAD
CENTER
POINT

(A) (B) (C) (D) (E)

(F) (G) (H)

0 12 60 120 240
SCALE 1" = 120'

DEVON ENERGY PRODUCTION COMPANY, L.P.
PAD GRADING AND CROSS SECTIONS
FOR FLAGLER 8 FEDERAL 21H
SECTION 8, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

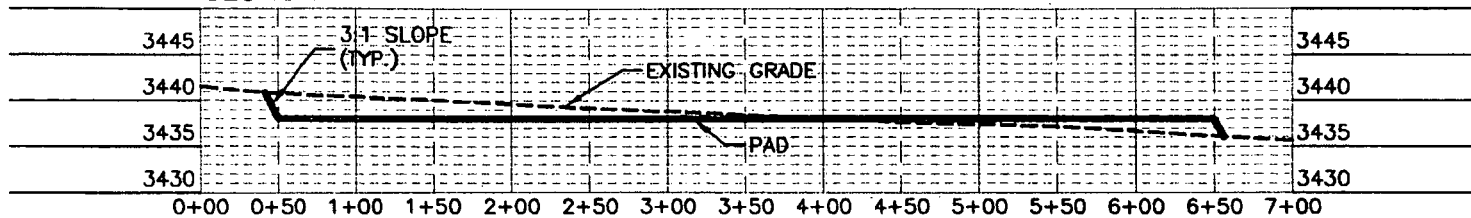
CUT	FILL	NET
3901 CU. YD	18639 CU. YD	14738 CU. YD (FILL)
EARTHWORK QUANTITIES ARE ESTIMATED		

JANUARY 28, 2018
MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3341

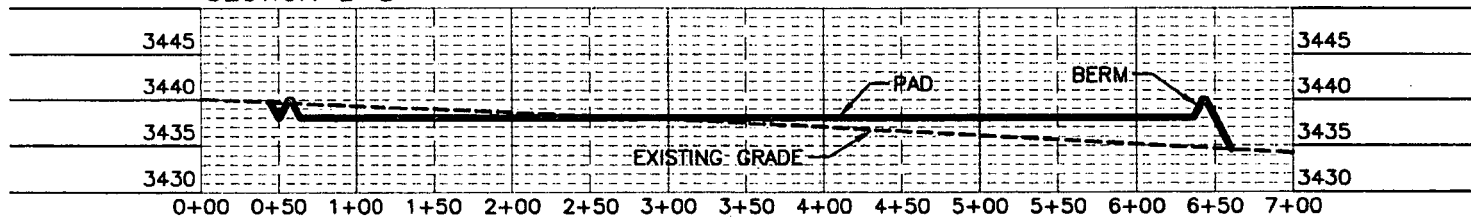
SHEET 1-2
SURVEY NO. 5828A

CROSS-SECTIONS

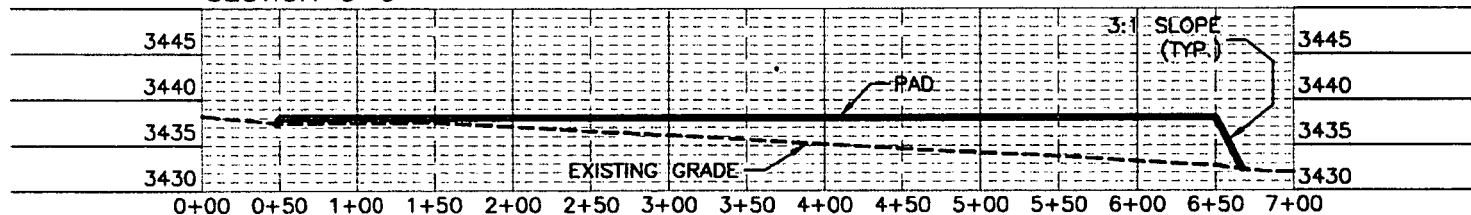
SECTION A-A'



SECTION B-B'



SECTION C-C'



0 12 60 120 240
SCALE 1" = 120' - 1" = 20' VER

DEVON ENERGY PRODUCTION COMPANY, L.P.
PAD GRADING AND CROSS SECTIONS
FOR FLAGLER 8 FEDERAL 21H
SECTION 8, TOWNSHIP 25 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

CUT	FILL	NET
3901 CU. YD	18639 CU. YD	14738 CU. YD (FILL)

EARTHWORK QUANTITIES ARE ESTIMATED

JANUARY 28, 2018

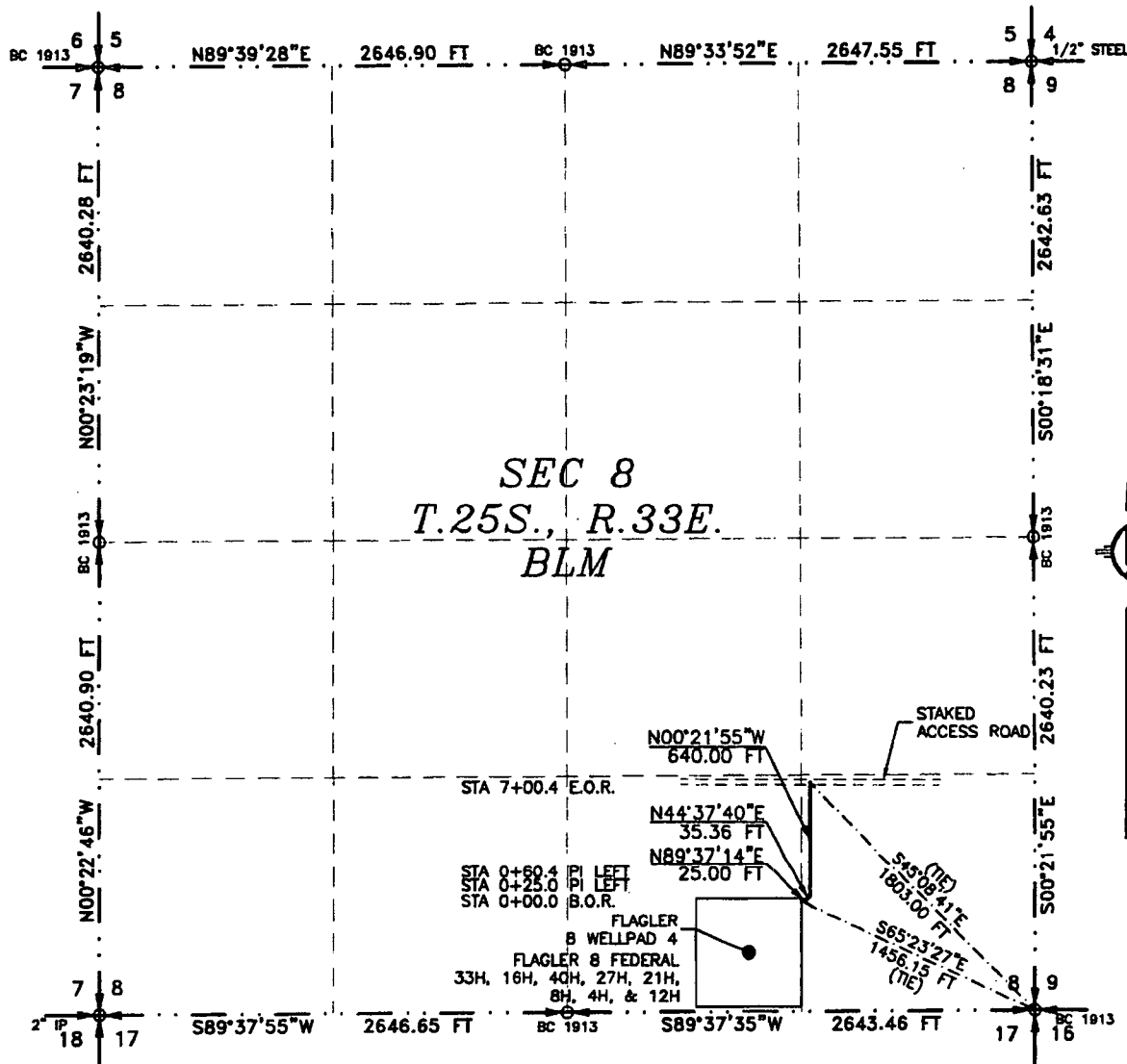
MADRON SURVEYING, INC. 301 SOUTH CANAL, CARLSBAD, NEW MEXICO (575) 234-3341

SHEET 2-2
SURVEY NO. 5828A

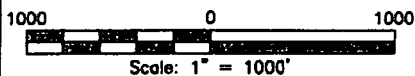
ACCESS ROAD PLAT

ACCESS ROAD FOR FLAGLER 8 WELLPAD 4
(FLAGLER 8 FEDERAL 33H, 16H, 40H, 27H, 21H, 8H, 4H, & 12H WELLS)

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
JANUARY 28, 2018



SEE NEXT SHEET (2-2) FOR DESCRIPTION



GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 1-2

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 28 DAY OF JANUARY 2018.

FILMON F. JARAMILLO, SURVEYOR
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 5828A

CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD FOR FLAGLER 8 WELLPAD 4
(FLAGLER 8 FEDERAL 33H, 16H, 40H, 27H, 21H, 8H, 4H, & 12H WELLS)

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
JANUARY 28, 2018

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M. BEARS S65°23'27"E, A DISTANCE OF 1456.15 FEET;
THENCE N89°37'14"E A DISTANCE OF 25.00 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N44°37'40"E A DISTANCE OF 35.36 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N00°21'55"W A DISTANCE OF 640.00 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 8, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M. BEARS S45°08'41"E, A DISTANCE OF 1803.00 FEET;

SAID STRIP OF LAND BEING 700.36 FEET OR 42.45 RODS IN LENGTH, CONTAINING 0.482 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4 700.36 L.F. 42.45 RODS 0.482 ACRES

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO, THIS 28 DAY OF JANUARY 2018


FILMON F. JARAMILLO, PLS. 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 2-2

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

SURVEY NO. 5828A



APD ID: 10400028550

Submission Date: 03/20/2018

Highlighted data
reflects the most
recent changes

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FLAGLER 8 FED

Well Number: 21H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	---	3467	0	0	OTHER : Surface	NONE	No
2	RUSTLER	2322	1145	1145	SANDSTONE	NONE	No
3	TOP SALT	1959	1508	1508	SALT	NONE	No
4	BELL CANYON	-1533	5000	5000	SANDSTONE	NATURAL GAS,OIL	No
5	BASE OF SALT	-1533	5000	5000	LIMESTONE	NONE	No
6	CHERRY CANYON	-2573	6040	6040	SANDSTONE	NATURAL GAS,OIL	No
7	BRUSHY CANYON	-4223	7690	7690	SANDSTONE	NATURAL GAS,OIL	No
8	BONE SPRING	-5643	9110	9110	SHALE	NATURAL GAS,OIL	No
9	BONE SPRING 1ST	-6549	10016	10016	SANDSTONE	NATURAL GAS,OIL	Yes
10	BONE SPRING 2ND	-7143	10610	10610	SANDSTONE	NATURAL GAS,OIL	No

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M

Rating Depth: 5000

Equipment: BOP/BOPE will be installed per Onshore Oil & Gas Order #2 requirements prior to drilling below 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 5M will be installed on the wellhead system. BOP/BOPE will be tested by an independent service company per Onshore Oil & Gas Order #2 requirements and MASP (Maximum Anticipated Surface Pressure) calculations. If the system is upgraded, all the components installed will be functional and tested.

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP stack to the choke manifold. See attached for specs for hydrostatic test chart.

Testing Procedure: A multibowl wellhead may be used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FLAGLER 8 FED

Well Number: 21H

Choke Diagram Attachment:

Flagler_8_Fed_21H_3M_BOPE_CK_20180319101341.pdf

BOP Diagram Attachment:

Flagler_8_Fed_21H_3M_BOPE_CK_20180319101357.pdf

Pressure Rating (PSI): 3M

Rating Depth: 10425

Equipment: BOP/BOPE will be installed per Onshore Oil & Gas Order #2 requirements prior to drilling below 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 5M will be installed on the wellhead system. BOP/BOPE will be tested by an independent service company per Onshore Oil & Gas Order #2 requirements and MASP (Maximum Anticipated Surface Pressure) calculations. If the system is upgraded, all the components installed will be functional and tested.

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Variance request: A variance is requested for the use of a flexible choke line from the BOP stack to the choke manifold. See attached for specs for hydrostatic test chart.

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Choke Diagram Attachment:

Flagler_8_Fed_21H_3M_BOPE_CK_20180319101412.pdf

BOP Diagram Attachment:

Flagler_8_Fed_21H_3M_BOPE_CK_20180319101436.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	1150	0	1150			1150	H-40	48	OTHER - BTC	1.125	1.25	BUOY	1.6	BUOY	1.6
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	5000	0	5000			5000	J-55	40	OTHER - BTC	1.125	1.25	BUOY	1.6	BUOY	1.6
3	PRODUCTION	8.75	5.5	NEW	API	N	0	14934	0	10425			14934	P-110	17	OTHER - BTC	1.125	1.25	BUOY	1.6	BUOY	1.6

Casing Attachments

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FLAGLER 8 FED

Well Number: 21H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Flagler_8_Fed_21H_Surf_Csg_Ass_20180319101452.pdf

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Flagler_8_Fed_21H_Int_Csg_Ass_20180319101501.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Flagler_8_Fed_21H_Prod_Csg_Ass_20180319101542.pdf

Section 4 - Cement

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FLAGLER 8 FED

Well Number: 21H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	815	901	1.33	14.8	1198	50	CLASS C	0.125 lbs/sack Poly-F-Flake

INTERMEDIATE	Lead		0	3950	511	3.65	10.3	1864	30	50:50 POZ	(65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sks Poly-E-Flake
INTERMEDIATE	Tail		3950	4450	306	1.33	14.8	407	30	CLASS C	0.125 lbs/sack Poly-F-Flake
PRODUCTION	Lead		4800	10300	524	3.27	9	1715	25	TUNED	N/A
PRODUCTION	Tail		10300	14934	1149	1.2	14.5	1379	25	CLASS H	(50:50) Clas H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring

Circulating Medium Table

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FLAGLER 8 FED

Well Number: 21H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1150	WATER-BASED MUD	8.33	9				2			
1150	5000	SALT SATURATED	9	10				2			
5000	1493 4	WATER-BASED MUD	8.33	9.3				12			

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Will run GRMWD from TD to from KOP. Cement bond logs will be run in vertical to determine top of cement. Stated logs run will be in the Completion Report and submitted to the BLM.

List of open and cased hole logs run in the well:

CALIPER,CBL,DS,GR,MUDLOG

Coring operation description for the well:

N/A

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4720

Anticipated Surface Pressure: 2426.5

Anticipated Bottom Hole Temperature(F): 160

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Flagler_8_Federal_21H_H2S_Plan_20180319103123.pdf

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FLAGLER 8 FED

Well Number: 21H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Flagler_8_Fed_21H_Dir_Svy_20180319103136.pdf

Flagler_8_Fed_21H_Plot_Plan_20180319103215.pdf

Other proposed operations facets description:

MULTI-BOWL VEREAGE
MULTI-BOWL WELLHEAD
CLOSED LOOP DESIGN PLAN
AC REPORT
DRILLING PLAN
CO-FLEX HOSE
SPUDDER RIG REQUEST
GCP

Other proposed operations facets attachment:

Flagler_8_Fed_21H_AC_Report_20180319103315.pdf

Flagler_8_Fed_21H_MB_Verb_3M_20180319103316.pdf

Flagler_8_Fed_21H_MB_Wellhd_3M_20180319103317.pdf

Flagler_8_Fed_21H_Clsd_Loop_20180319103316.pdf

Flagler_8_Fed_21H_Spudder_Rig_Info_20180319103325.pdf

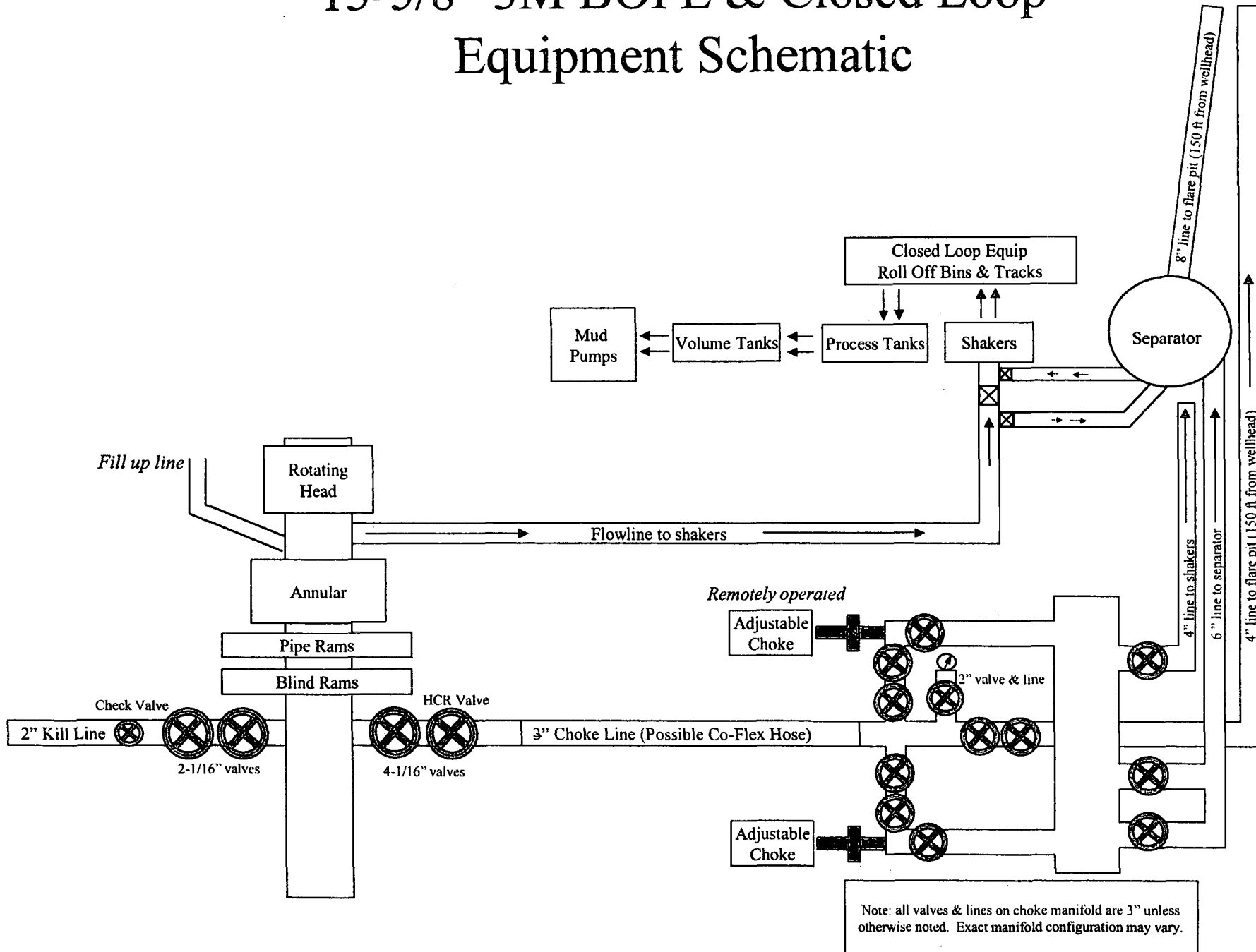
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Flagler_8_Fed_21H_GCP_Form_20180517082317.pdf

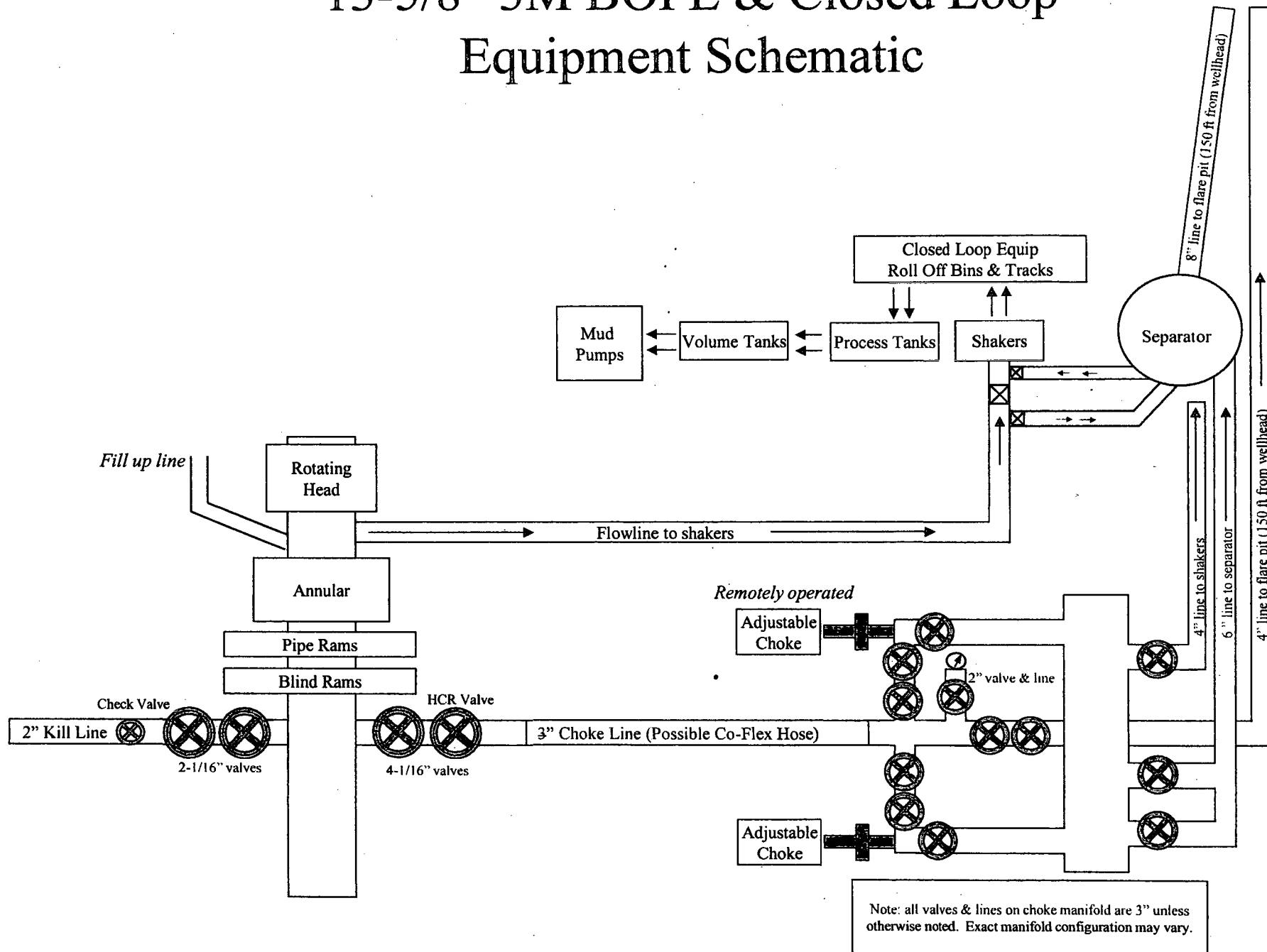
Other Variance attachment:

Flagler_8_Fed_21H_Co_flex_20180319103433.pdf

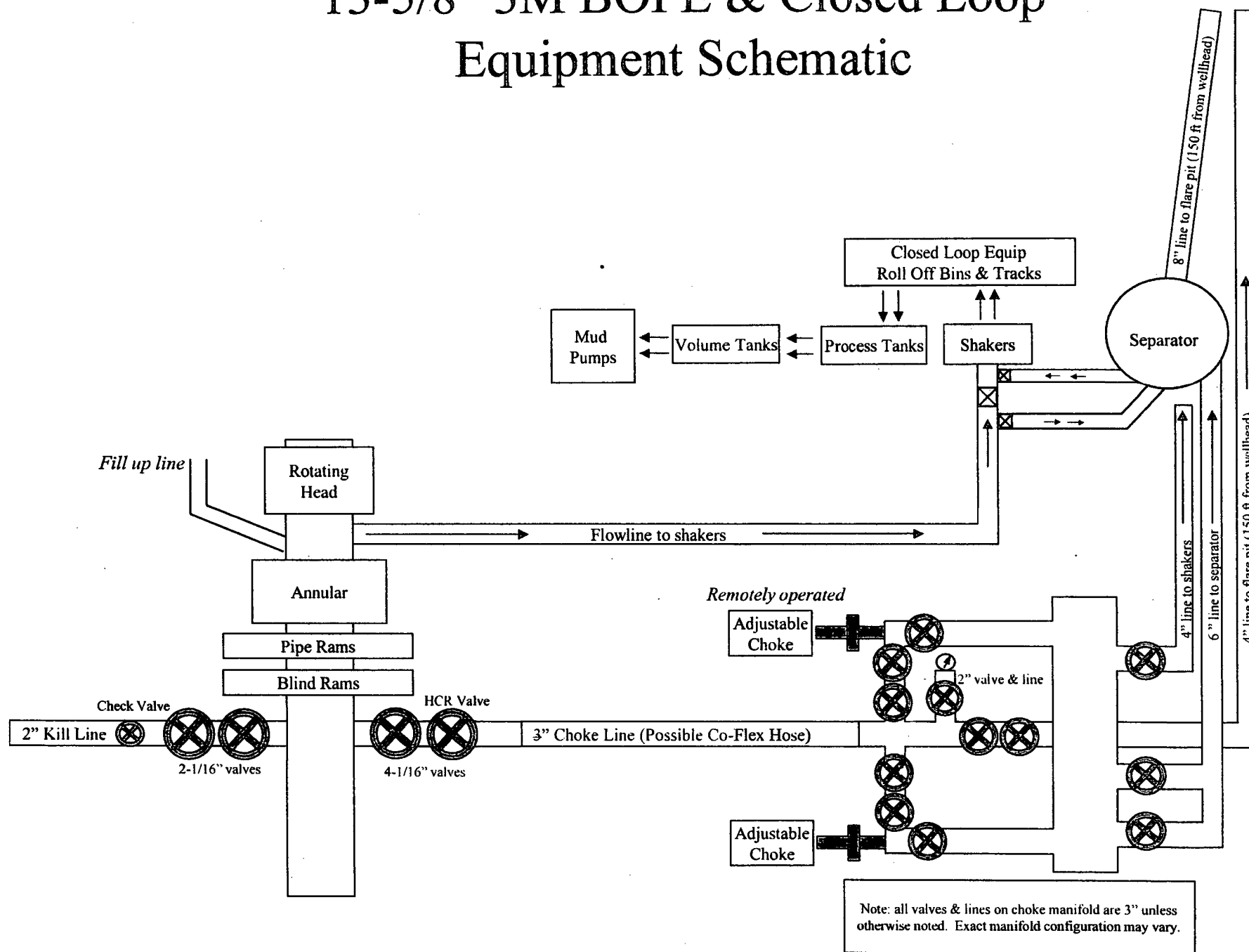
13-5/8" 3M BOPE & Closed Loop Equipment Schematic



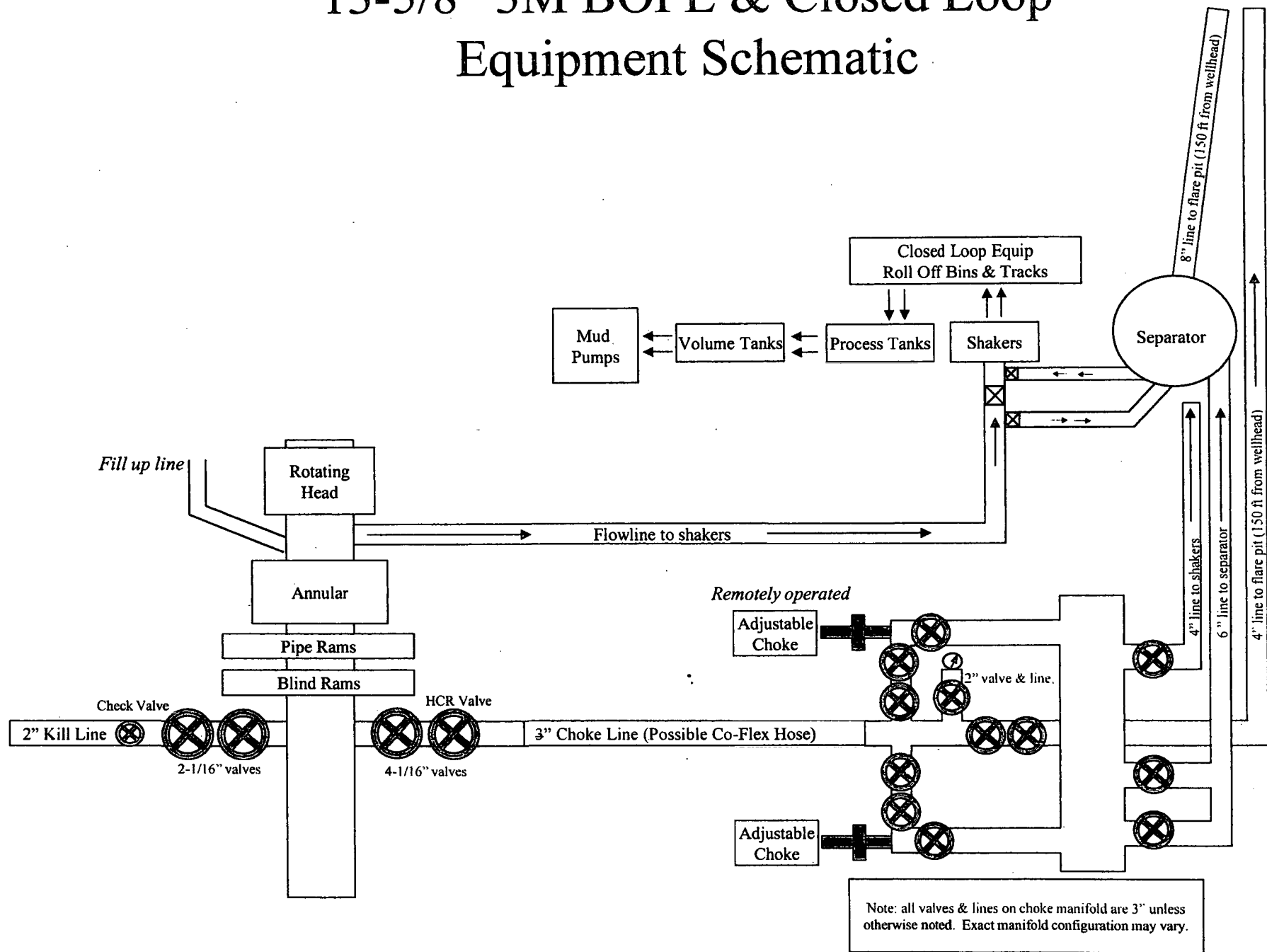
13-5/8" 3M BOPE & Closed Loop Equipment Schematic



13-5/8" 3M BOPE & Closed Loop Equipment Schematic



13-5/8" 3M BOPE & Closed Loop Equipment Schematic



Casing Assumptions and Load Cases

Intermediate

All casing design assumptions were ran in Stress Check to determine safety factor which meet or exceed both Devon Energy and BLM minimum requirements. All casing strings will be filled while running in hole in order to not exceed collapse rating of the pipe.

Intermediate Casing Burst Design		
Load Case	External Pressure	Internal Pressure
Pressure Test	Formation Pore Pressure	Max mud weight of next hole-section plus Test psi
Drill Ahead	Formation Pore Pressure	Max mud weight of next hole section
Fracture @ Shoe	Formation Pore Pressure	Dry gas

Intermediate Casing Collapse Design		
Load Case	External Pressure	Internal Pressure
Full Evacuation	Water gradient in cement, mud above TOC	None
Cementing	Wet cement weight	Water (8.33ppg)

Intermediate Casing Tension Design	
Load Case	Assumptions
Overpull	100kips
Runing in hole	2 ft/s
Service Loads	N/A

Casing Assumptions and Load Cases

Production

All casing design assumptions were ran in Stress Check to determine safety factor which meet or exceed both Devon Energy and BLM minimum requirements. All casing strings will be filled while running in hole in order to not exceed collapse rating of the pipe.

Production Casing Burst Design		
Load Case	External Pressure	Internal Pressure
Pressure Test	Formation Pore Pressure	Fluid in hole (water or produced water) + test psi
Tubing Leak	Formation Pore Pressure	Packer @ KOP, leak below surface 8.6 ppg packer fluid
Stimulation	Formation Pore Pressure	Max frac pressure with heaviest frac fluid

Production Casing Collapse Design		
Load Case	External Pressure	Internal Pressure
Full Evacuation	Water gradient in cement, mud above TOC.	None
Cementing	Wet cement weight	Water (8.33ppg)

Production Casing Tension Design	
Load Case	Assumptions
Overpull	100kips
Runing in hole	2 ft/s
Service Loads	N/A

Casing Assumptions and Load Cases

Surface

All casing design assumptions were ran in Stress Check to determine safety factor which meet or exceed both Devon Energy and BLM minimum requirements. All casing strings will be filled while running in hole in order to not exceed collapse rating of the pipe.

Surface Casing Burst Design		
Load Case	External Pressure	Internal Pressure
Pressure Test	Formation Pore Pressure	Max mud weight of next hole-section plus Test psi
Drill Ahead	Formation Pore Pressure	Max mud weight of next hole section
Displace to Gas	Formation Pore Pressure	Dry gas from next casing point

Surface Casing Collapse Design		
Load Case	External Pressure	Internal Pressure
Full Evacuation	Water gradient in cement, mud above TOC	None
Cementing	Wet cement weight	Water (8.33ppg)

Surface Casing Tension Design	
Load Case	Assumptions
Overpull	100kips
Runing in hole	3 ft/s
Service Loads	N/A